

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

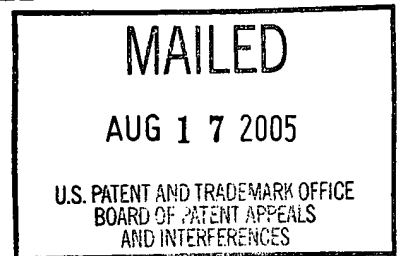
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte MARVIN K. SIMON and TSUN-YEE YAN

Appeal No. 2005-2292  
Application No. 09/496,135

ON BRIEF



Before KRASS, BARRY and SAADAT, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

Decision On Appeal

This is a decision on appeal from the final rejection of claim 6.

The invention is directed to a special cross correlated trellis coded quadrature modulation device. Of special concern is the spectral occupancy of the transmitted signal.

Appeal No. 2005-2292  
Application No. 09/496,135

Claim 6 is reproduced as follows:

6. A method of coding signals comprising producing a FQPSK that has no slope discontinuity.

The examiner relies on the following reference:

Kato et al. (Kato)	4,567,602	Jan. 28, 1986
--------------------	-----------	---------------

Claim 6 stands rejected under 35 U.S.C. § 102(b) as anticipated by Kato.

Reference is made to the brief and answer for the respective positions of appellants and the examiner.

#### OPINION

A rejection for anticipation under section 102 requires that the four corners of a single prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation. In re Paulsen, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

It is the examiner's position, referring specifically to Figure 6 of Kato, that Kato discloses a method for coding signals producing Feher-quadrature phase shift keying (FQPSK) that has no slope discontinuity.

For their part, appellants argue that Kato's signal would have the slope discontinuities, as explained in the instant

Appeal No. 2005-2292  
Application No. 09/496,135

specification. In particular, appellants contend that "[b]ecause figure 6 maps the I and Q signals over half symbol combinations, there may be a slope discontinuity at the location between adjacent half symbol boundaries" (brief-page 4), and this is mentioned at pages 12-14 of the instant specification, wherein such prior art approaches are discussed.

It is appellants' contention that Kato nowhere discusses how to avoid this slope discontinuity. Therefore, appellants contend, since Kato is merely representative of the prior art described by appellants and Kato discloses nothing to avoid the problem of slope discontinuities, Kato cannot anticipate the instant claimed invention.

"The name of the game is the claim" In re Hiniker, 150F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Accordingly, our analysis must begin with the claim on appeal.

The claim is very straightforward, and broad. It requires a coding technique whereby a FQPSK, having no slope discontinuity, is produced. The claim recites no particular method steps or structure for achieving the recited result. It merely requires a FQPSK modulation technique wherein a signal having no slope discontinuity is produced.

Appeal No. 2005-2292  
Application No. 09/496,135

There is no dispute between the parties anent Kato disclosing a FQPSK technique. The only dispute is whether the reference discloses the recited "no slope discontinuity."

We will sustain the examiner's rejection of claim 6 under 35 U.S.C. § 102(b).

While we understand, as pointed out by appellants, that there may be a slope discontinuity at the location between adjacent half symbol boundaries in Figure 6 of Kato, it is our view that the instant claim is so broad that each half symbol in Kato's Figure 6 reads on the claimed subject matter.

The instant claim does not require that the entire FQPSK signal have no slope discontinuity. Each of the half symbols in Kato's Figure 6 may, itself, be considered a FQPSK signal. Clearly, as shown in Figure 6 of Kato, each of the half symbols has no slope discontinuity since each is a continuous curve.

Accordingly, while we understand the distinction appellants are attempting to make between their invention and that disclosed by Kato, the broad language of the instant claim is clearly met by each of the half symbols in Figure 6 of Kato.

Appeal No. 2005-2292  
Application No. 09/496,135

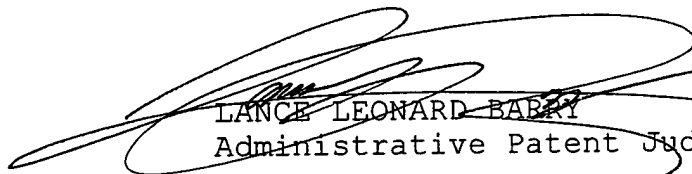
Accordingly, the examiner's decision is affirmed.

No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a)(1)(iv).

AFFIRMED

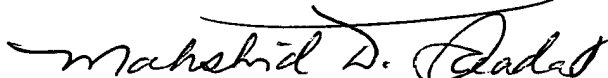


ERROL A. KRASS )  
Administrative Patent Judge )



LANCE LEONARD BARRY )  
Administrative Patent Judge )

BOARD OF PATENT  
APPEALS AND  
INTERFERENCES



MAHSHID D. SAADAT )  
Administrative Patent Judge )

EK/rwk

Appeal No. 2005-2292  
Application No. 09/496,135

FISH & RICHARDSON, PC  
12390 EL CAMINO REAL  
SAN DIEGO, CA